



SYMBIOTICS

BEYOND THE CHECKLIST

Shaping exceptional pilot instructors for the future



Aleksandra Kapela

- Aviation Psychologist
- MSc in Occupational Psychology
- Human Factors Specialist
- Ground School Instructor
- Works with individuals, flight schools, airlines, operators
- Pilot suitability, personality, well-being, mental health

Symbiotics Limited

- Over 25 years' experience of providing
- assessment and selection
- Training and consultancy services in over 130 locations
- Spread through 80 countries, across 5 continents
- Specialised in the aviation industry

UNUSUAL MARKET

- Very sensitive
- Unpredictive
- Short vs long term demands
- Emotionally driven
- Various pace of development
- Stiff



UNCHANGING ASPECTS

- Demand
- Challenging environment/roles/ processes
- High dropouts during the training
- Bottom-up solutions



MAIN ISSUES

- Non-technical aspects
- Low support
- Slow respond to challenges
- Lack of cooperation
- Bottom-up solutions
- Lack of focus on critical personnel

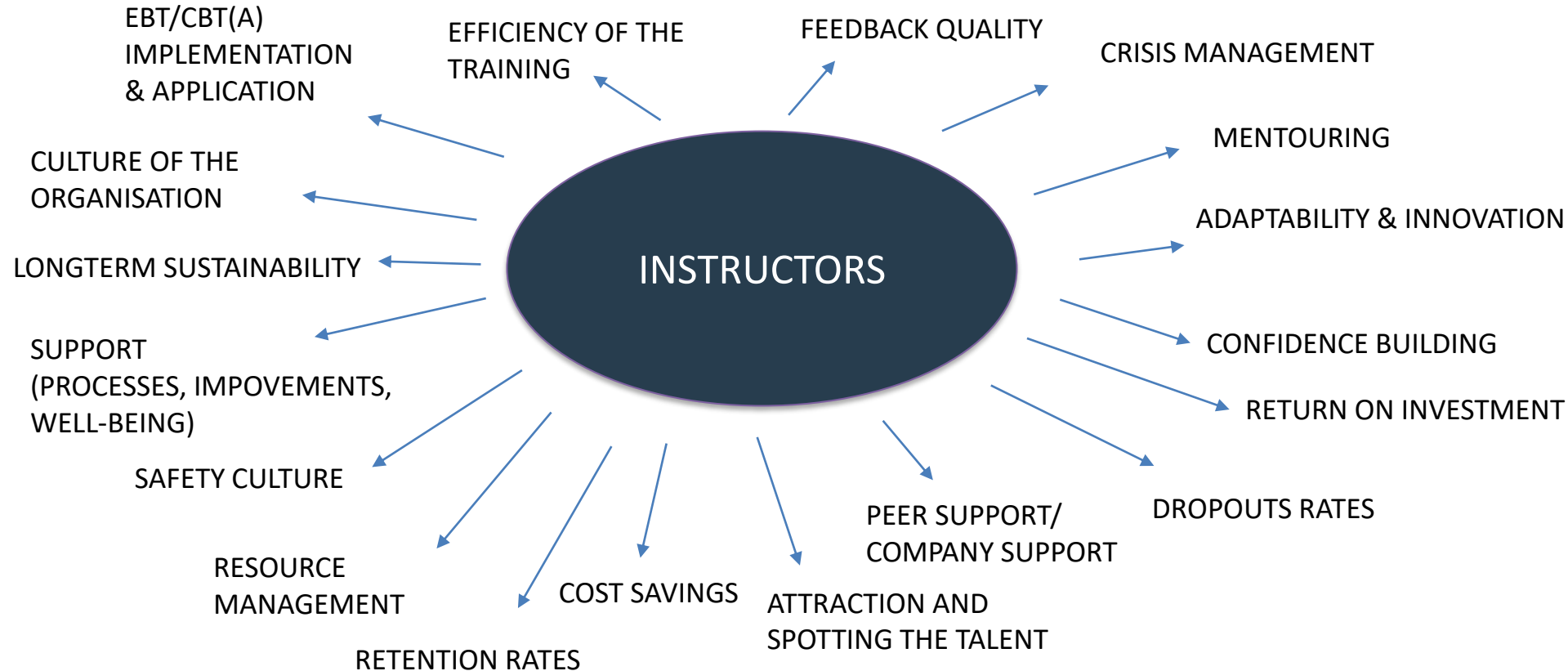


CRITICAL PERSONNEL - INSTRUCTORS

- Not enough instructors
- Demotivated instructors
- Non-suited instructors
- Unadaptable Instructors



WHY CRITICAL?



THE MAIN PROBLEMS



Wrong Reasons

temporary, easy way to
obtain the flight
experience



Poor Match

Personality, attitudes,
teaching styles

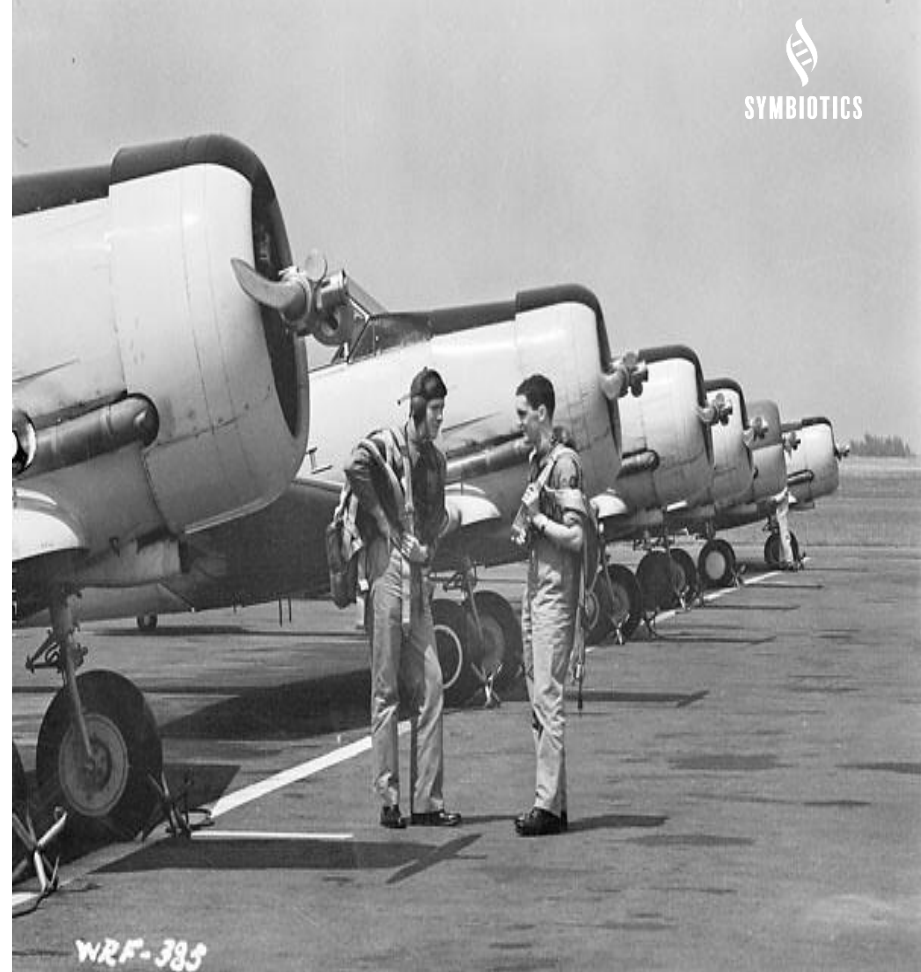


Low Motivation

Low satisfaction, low
salary, no rewards

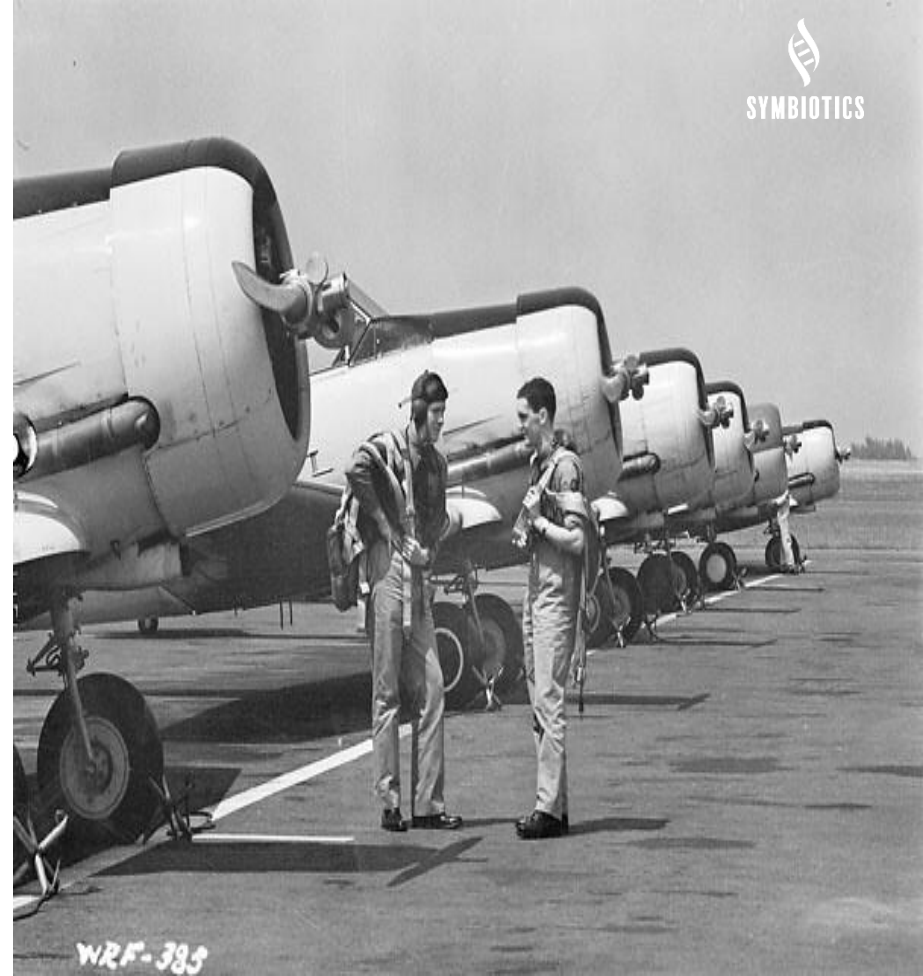
REIMAGINING INSTRUCTORS

- Industry situation
- Industry knowledge
- Cultural & economical factors
- Flight school/airline changes
- Students'/pilots' approach



REIMAGINING INSTRUCTORS

- Personality
- Competencies
- Attitudes
- Motivation
- Teaching Styles



PAST & FUTURE



OLD APPROACH

NEW APPROACH

PERSONALITY

Low agreeableness, high confidence, extraversion - not important,

Emotional Intelligence, empathy, average confidence, higher agreeableness, openness & not too low extraversion

COMPETENCIES

Technical knowledge and skills

Leadership, communication, decision-making, problem solving, teaching abilities, application of knowledge

ATTITUDE

Macho attitude, high authority gradient

High safety attitudes, lower macho attitude and authority gradient

MOTIVATION

Motivation not important

Internal, long-term, motivation drivers – (connected with attitudes and personality)

STYLE

Teaching style not important

Appropriate teaching style highly important

NEEDED ACTION



**Focus on proper
assessment**

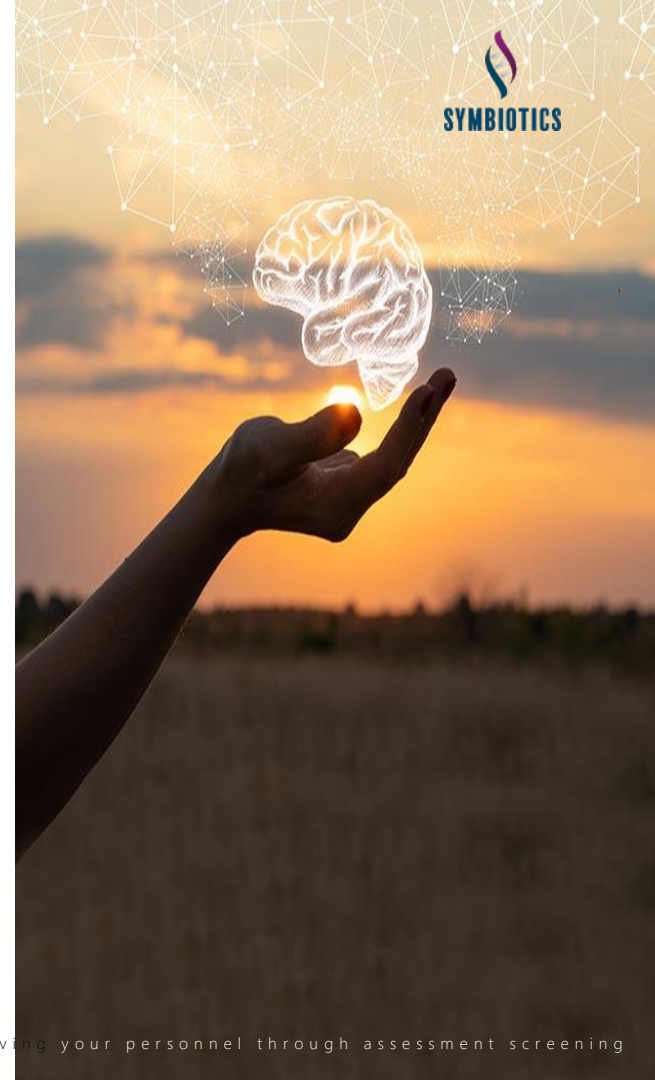
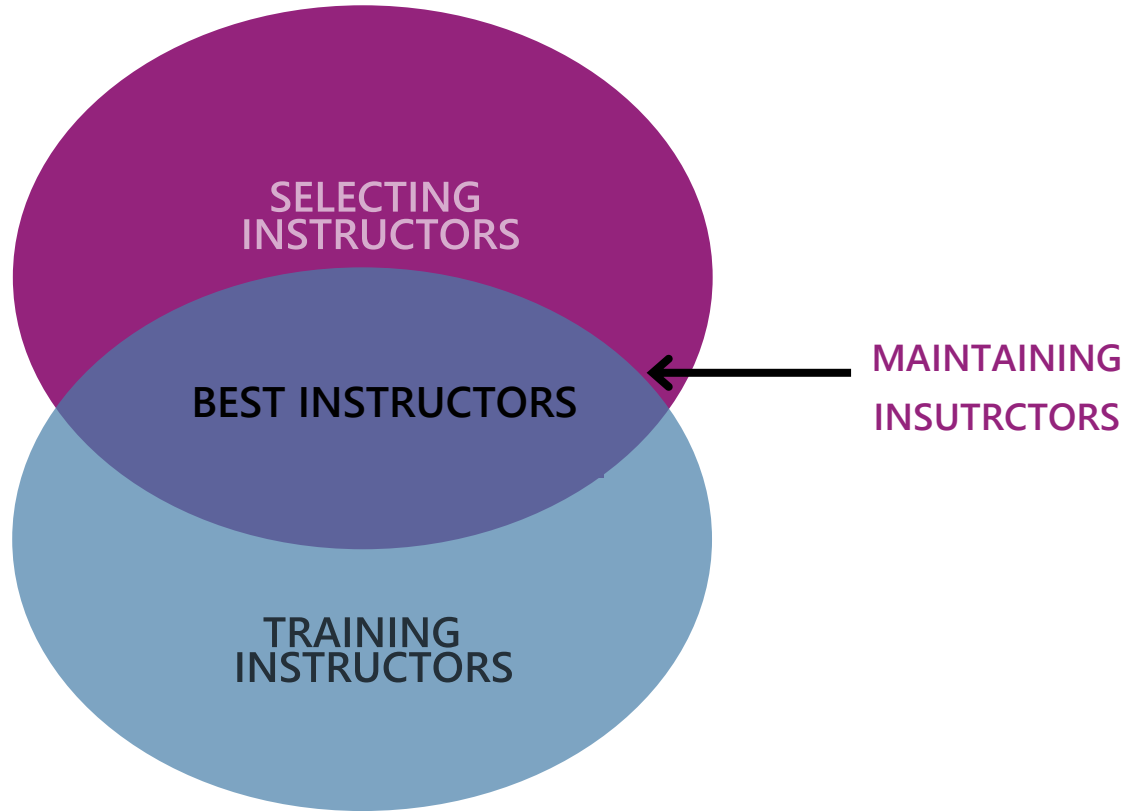


**Education and training for
better teaching and
learning**



**Focus on this role in the
industry**

STRATEGY



ASSESSING INSTRUCTORS



External candidates

Focus on proper selection process - personality, attitudes, proper interview, previous experience, culture



Internal candidates

Assessments, collection of previous information, assessment, observations, social interactions



Ab initio candidates

Assessments focus on future roles, conversation, observation, benefits

TRAINING INSTRUCTORS



Improving Competencies

Evaluating current level and improving with right training methods



Improving Teaching Styles & Attitudes

Evaluating current styles and attitudes and providing education, training, tools



Improving Knowledge

Learning by example, education, FI courses, recurrent training

READY SOLUTIONS

PERSONALITY QUESTIONNAIRE (APQ)	INSTRUCTORS CAPABILITIES ASSESSMENT	MOTIVATIONAL DRIVERS
<ul style="list-style-type: none">• Widely used within the aviation sector• Includes traits specific to this sector, such as Safety Culture, in addition to the general traits (Big Five Factor)• Proven predictive validity when used as part of a battery of appropriate tests• Cultural measures derived from Hofstede, can be adjusted to the needs of country or region, to recognize the necessary diversity	<ul style="list-style-type: none">• Final report presents the results from the two tests, exploring a candidates' knowledge, understanding and attitude• Provides a detailed overview of specific instructional style i.e. Formal Authority, Expert, Personal Model, Facilitator or Delegator.	<ul style="list-style-type: none">• Derived from work done at Harvard, has been used extensively in the corporate sector and forms a good complement to the APQ• Checks appropriate motivation to perform the role they are applying for

READY SOLUTIONS



PQ Summary



No Concerns
The candidate's profile indicates strong potential for transition into the role, with no real areas of concern highlighted.

Silhouette Profile:

TP3d

Average Match

This description is for people who score highly on the relevant scales. A more balanced score will tend to produce a muted demonstration of these behaviours:

Highly structured, cautious but consistent performer who may be heavily dependent on formal tuition and may never feel that they have sufficiently prepared to take exams and tests. Will have good ability to pick up practical skills, and will also be able to apply the 'thinking bit' of performance as they enjoy information and logic. May lack confidence for major check rides and be looking for excuses such as weather and other external factors that could prevent them progressing. Can be very uncomfortable in dynamic situations and can feel the effect of pressure and stress acutely, likely to attribute the cause of this discomfort to external factors and not want to take responsibility.

Generally hard-working and diligent, and may appear to drive themselves hard and relentlessly. May blame parents or spouses as the reason for not being able to do the things they state they would like to achieve. Extremely organised with meticulous attention to detail. Often dependent and can be seen as stubborn and inflexible in teams. With support they can have the insight to develop good coping strategies, and the drive to apply them. Can be successful in sports such as long distance cycling, running or challenges which require technical detail but no direct competition.

Overall Fit

Role: No Concerns
Personal Style: Minor Concerns
Character: Minor Concerns
Work Environment: No Concerns

Key Attributes

Vulnerability (Self-awareness System Management) No Concerns
Stress Management (Self-awareness System Management) No Concerns
Assertiveness (Self-awareness Contentment & Leadership) No Concerns
Conscientiousness (Self-awareness Safety Values & Contentment Attitude) No Concerns
Morality (Self-awareness Compliance Values) Some Concerns

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Instructor Capability



Overall Suitability

Instructor Knowledge 80%

Instructor Knowledge looks at the understanding of the individual regarding the right approach to take in different trainee/trainee interactions.

Minor concerns. This individual has mostly endorsed the 'ideal' answer for the situations described.

Instructor Style

There are a number of different styles of instructional interaction that are recognised as being effective in different situations or with different students. Individuals have varying levels of preference in their use of these styles: some have a strong preference for one style and using it as their 'go-to' methodology. Others will be more flexible and use the wider range of styles as the occasion demands. There are no right or wrong styles; instead the style adopted is not matched to the learning preferences of the students. Then, the teaching will be ineffective.

Expert:	preference level:	Moderate
Formal Authority:	preference level:	High
Personal Model:	preference level:	Moderate
Facilitator:	preference level:	Moderate
Delegator:	preference level:	Moderate

Style description:

The person with a moderate preference for using the Expert style may appear as a reluctant "sage on the stage" imparting their knowledge to passive participants. However, they often possess status among students because of their knowledge, and their role as a faculty member, and their lectures are well-attended. Students are expected to take some responsibility for learning what they need to know and for asking for help when they don't understand something. People who have a strong preference for a formal authority teaching style tend to focus on content. This style is generally teacher-centred, where the instructor feels responsible for providing and controlling the flow of content and the student is expected to receive the content. A person with a moderate preference for the Personal Model style will be fairly comfortable acting as a role model by demonstrating skills, and processes and then as a coach/guide in helping students develop and apply these skills and knowledge. They have some interest in encouraging student participation and may be able to adapt their presentation to include various learning styles.

People with a moderate preference for the Facilitator style are able to design activities, social interactions, or problem-solving situations that require student processing and application of course content in creative and original ways where the content is appropriate. This type of teaching style works best for students who are comfortable with independent learning and who can actively participate and collaborate with other students. A person with a moderate preference for a Delegative style of instructing will be able to adopt this style when their students have appropriate levels of knowledge and a learning style that is receptive to independent study. The student's capabilities also must include a willingness to take initiative and to accept more responsibility for their own learning. People with a Delegator style must be willing to give up direct control over how learners engage various tasks and their outcomes, which is the aspect that those with a moderate preference may struggle with.

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Motivation Drivers Results:



Driver 1 2 3 4 5 6 7 8 9 10 High Scorers

Level of Activity: *Readily invests energy, always on the move, prefers to get things done, moves and reacts quickly, shoves on time pressure, often working when others have given up.*

Competitiveness: *Likes to do better than others, refers to how well or badly others are doing. Comparison with others causes action to be taken. Enjoys challenges and achieving targets.*

Affiliation: *Positively attracted to working in a team and helping others. Enjoys team success and the benefits of mutual support. Becomes dysfunctional when confronted with conflict in the team or work group.*

Power: *Enjoys exercising authority and needs to feel responsible. Becomes dysfunctional when there is no opportunity to be influential.*

Locus of Control: *Behaves in a way which indicates a sense of control over events. Enjoys shaping events and does not see why others should determine the way things are.*

Status: *Concerned with position relative to others and with the visible signs of achievement. Needs to be respected by others.*

Material Reward: *Links success to salary. Is motivated by perks and bonuses. Becomes dysfunctional when remuneration is perceived to be inadequate or low.*

Autonomy: *Prefers to work without restraints by others. Enjoys setting own timescale, priorities and approach. Reacts badly to close supervision.*

Intrinsic Interest: *Attracted towards new and varied work, motivation is directly linked to personal interest in the work. Can cope with ambiguity. Demotivated by routine.*

Involvement: *Becomes highly involved with the work, puts in extended hours, sacrifices home life to the work at hand.*

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THANK YOU –
ANY QUESTIONS?



Teme House,
Whittington Road,
Worcester, UK
WR5 2RY



www.symbioticsltd.com



+44 (0) 1905 368 175



www.symbioticsltd.com/contact-us